Case 5-5

NATIONAL ACADEMY OF SCIENCES.

CONSTITUTION

AND

MEMBERSHIP

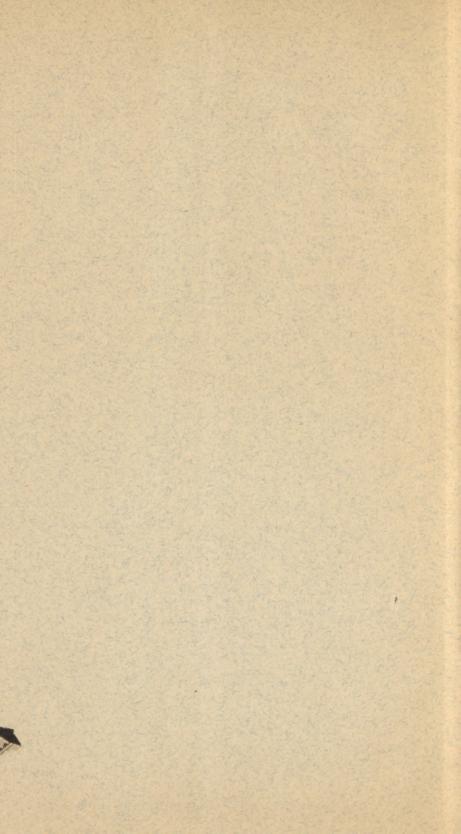
JUNE 10, 1885.



PRINTED FOR THE ACADEMY.

437)

WASHINGTON:
JUDD & DETWEILER, PRINTERS.
1885.



NATIONAL ACADEMY OF SCIENCES.

CONSTITUTION

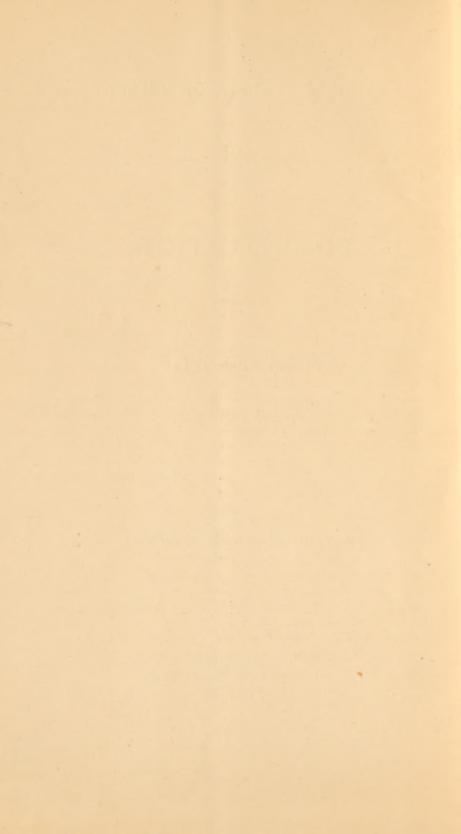
AND

MEMBERSHIP

JUNE 10, 1885.

PRINTED FOR THE ACADEMY.

WASHINGTON:
JUDD & DETWEILER, PRINTERS.
1885.



AN ACT

TO INCORPORATE

THE NATIONAL ACADEMY OF SCIENCES.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Louis Agassiz, Massachusetts; J. H. Alexander, Maryland; S. Alexander, New Jersey; A. D. Bache, at large; F. B. Barnard, at large; J. G. Barnard, United States Army, Massachusetts; W. H. C. Bartlett, United States Military Academy, Missouri; U. A. Boyden, Massachusets; Alexis Caswell. Rhode Island; William Chauvenet, Missouri; J. H. C. Coffin, United States Naval Academy, Maine; J. A. Dahlgren, United States Navy, Pennsylvania; J. D. Dana, Connecticut; Charles H. Davis, United States Navy, Massachusetts; George Englemann, St. Louis, Missouri; J. F. Frazer, Pennsylvania; Wolcott Gibbs, New York; J. M. Gilless, United States Navy, District of Columbia; A. A. Gould, Massachusetts; B. A. Gould, Massachusetts; Asa Gray, Massachusetts; A. Guyot, New Jersey; James Hall, New York; Joseph Henry, at large; J. E. Hilgard, at large, Illinois; Edward Hitchcock, Massachusetts; J. S. Hubbard, United States Naval Observatory, Connecticut; A. A. Humphreys, United States Army, Pennsylvania; J. L. Le. Conte, United States Army, Pennsylvania; J. Leidy, Pennsylvania; J. P. Lesley, Pennsylvania; M. F. Longstreth, Pennsylvania; D. H. Mahan, United States Military Academy, Virginia; J. S Newberry, Ohio; H. A. Newton, Connecticut; Benjamin Pierce, Massachusetts; John Rodgers, United States Navy, Indiana; Fairman Rogers, Pennsylvania; R. E. Rogers, Pennsylvania; W. B. Rogers, Massachusetts; L. M. Rutherford, New York; Joseph Saxton, at large; Benjamin Silliman, Connecticut; Benjamin Silliman, junior, Connecticut; Theodore Strong, New J-rsey; John Torrey, New York; J. G. Totten, United States Army, Connecticut; Joseph Winlock, United States Nautical Almanac, Kentucky; Jeffries Wyman, Massachusetts; J. D. Whitney, California, their associates and successors duly chosen. are hereby incorporated, constituted, and declared to be a body corporate, by the name of the National Academy of Sciences.

SECTION 2. And be it further enacted, That the National Academy of Sciences shall consist of not more than fifty ordinary members, and the said corporation hereby constituted shall have power to make its own organization, including its constitution, by-laws, and rules and regulations; to fill all vacancies created by death, resignation, or otherwise; to provide for the election of foreign and

domestic members, the division into classes, and all other matters needful or usual in such institution, and to report the same to Congress.

SECTION 3. And be it further enacted, That the National Academy of Sciences shall hold an annual meeting at such place in the United States as may be designated, and the Academy shall, whenever called upon by any department of the government, investigate, examine, experiment, and report upon any subject of science or art, the actual expense of such investigations, examinations, experiments, and reports, to be paid from appropriations which may be made for the purpose, but the academy shall receive no compensation whatever for any services to the government of the United States.

APPROVED, March 3, 1863.

AN ACT

To amend the Act to incorporate the National Academy of Sciences.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act to incorporate the National Academy of Sciences, approved March three, eighteen hundred and sixty-three, be, and the same is hereby, so amended as to remove the limitation of the number of ordinary members of said academy as provided in said act.

APPROVED, July 14, 1870.

True copies.

DEPARTMENT OF STATE, June 10th, 1882.

SEVELLON A. BROWN, Chief Clerk.

AN ACT

To authorize the National Academy of Science: to receive and hold trust funds for the promotion of science, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the National Academy of Sciences, incorporated by the act of Congress approved March third, eighteen hundred and sixty-three, and its several supplements, be, and the same is hereby, authorized and empowered to receive bequests and donations, and hold the same in trust, to be applied by the said Academy in aid of scientific investigations and according to the will of the donors.

APPROVED, June 20, 1884.

A true copy.

DEPARTMENT OF STATE, June 24, 1884.

SEVELLON A. BROWN, Chief Circk.

CONSTITUTION AND RULES

OF

THE NATIONAL ACADEMY OF SCIENCES

As amended and adopted April 17, 1872, and further amended April 20, 1875, April 21, 1881, April 19, 1882, and April 18, 1883.

PREAMBLE.

EMPOWERED by the Act of Incorporation enacted by Congress, and approved by the President of the United States, on the 3d day of March, A. D. 1863, and in conformity with the amendment to said Act, approved July 14, 1870, the National Academy of Sciences adopt the following amended Constitution and Rules:

ARTICLE I.

OF MEMBERS.

SECTION 1. The Academy shall consist of Members, Honorary Members, and Foreign Associates. Members must be citizens of the United States.

SECT. 2. Members who, from age or inability to attend the sessions of the Academy, wish to resign the duties of active membership may, at their own request, be transferred to the roll of Honorary Members by a vote of the Academy.

Sect. 3. The Academy may elect fifty Foreign Associates. Sect. 4. Honorary Members and Foreign Associates shall have the privilege of attending the meetings, and of reading and communicating papers to the Academy, but shall take no part in its business, shall not be subject to its

assessments, and shall be entitled to a copy of the publications of the Academy.

ARTICLE II.

OF THE OFFICERS.

SECT. 1. The officers of the Academy shall be a President, a Vice-President, a Foreign Secretary, a Home Secretary, and a Treasurer, all of whom shall be elected for a term of six years, by a majority of votes present at the first stated session after the expiration of the current terms, provided that existing officers retain their places until their successors are elected. In case of a vacancy, the election for six years shall be held in the same manner at the session when such vacancy occurs, or at the next stated session thereafter, as the Academy may direct. A vacancy in the office of Treasurer or Home Secretary may, however, be filled by appointment of the President of the Academy until the next stated session of the Academy.

SECT. 2. The officers of the Academy, together with six members, to be elected by the Academy at the first stated session in each year, shall constitute a Council for the transaction of such business as may be assigned to them by the Constitution or the Academy.

SECT. 3. The President of the Academy, or, in case of his absence or inability to act, the Vice-President, shall preside at the meetings of the Academy and of the Council; shall name all committees except such as are otherwise especially provided for; shall refer investigations required by the Government of the United States to members especially conversant with the subjects, and report thereon to the Academy at its session next ensuing; and, with the Council, shall direct the general business of the Academy.

It shall be competent for the President, in special cases, to call in the aid, upon committees, of experts, or men of special attainments, not members of the Academy.

SECT. 4. The Foreign and Home Secretaries shall conduct

the correspondence proper to their respective departments, advising with the President and Council in cases of doubt, and reporting their action to the Academy at one of the stated sessions in each year.

It shall be the duty of the Home Secretary to give notice to the members of the place and time of all meetings, of all nominations for membership, and of all proposed amendments to the Constitution.

The minutes of each session shall be duly engrossed before the next stated session, under the direction of the Home Secretary.

SECT. 5. The Treasurer shall attend to all receipts and disbursements of the Academy, giving such bond and furnishing such vouchers as the Council may require. He shall collect all dues from members, and keep a set of books showing a full account of receipts and disbursements. He shall present a general report at the April session. He shall be the custodian of the corporate seal of the Academy.

ARTICLE III.

OF THE MEETINGS.

SECT. 1. The Academy shall hold one stated session in each year, in the city of Washington, on the third Tuesday in April, and another may be held at such place and time as the Council shall determine.

Special sessions of the Academy may be called by order of eight members of the Council, at such place and time as may be designated in the call.

Scientific sessions of the Academy may be held at times and places to be designated by a majority of the Council.

SECT. 2. The names of the members present at each daily meeting shall be recorded in the minutes; and the members present at any meeting shall constitute a quorum for the transaction of business.

SECT. 3. Scientific meetings of the Academy, unless otherwise ordered by a majority of the members present, shall be

open to the public; those for the transaction of business closed.

SECT. 4. The stated meetings of the Council shall be held during the stated or special sessions of the Academy. Special meetings may be convened at the call of the President and two members of the Council, or of four members of the Council.

Sect. 5. No member who has not paid his dues shall take part in the business of the Academy.

ARTICLE IV.

OF ELECTIONS AND RESIGNATIONS.

Sect. 1. All elections shall be by ballot, and each election shall be held separately, unless otherwise ordered by this Constitution.

SECT. 2. The time for holding an election for officers shall be fixed by the Academy at least one day before the election is held.

SECT. 3. The six additional members of the Council shall be elected on any day after the first of the first stated session in each year, by each voter inscribing six names on his ballot, and those six who have received more votes than any others shall be declared elected. If two or more names have received the lowest number of votes that would elect, additional balloting shall be had for as many members as remain each time to be elected until the number is full.

The term of the members so elected shall commence at the close of the session at which they are elected, and continue until the close of the first stated session in the next year.

SECT. 4. Nominations of members may be made in writing, signed by any five members of the Academy at any stated session, to be voted on at the next stated session held in Washington, and each nomination shall, at the time of election, be accompanied by a written list of the original works of the nominee.

Sect. 5. Elections for membership shall be held in the following manner: Each member may inscribe on a ballot not more than five names of nominees selected from the list. Absent members may send such ballots to the Home Secretary. From the seven names receiving the highest number of votes in this preference ballot, the members present may proceed to elect new members in the following manner: At each ballot, each member present may vote for not exceeding three persons, and the person receiving the highest number of votes shall be declared elected, provided that he received two-thirds of the votes cast, and that his name appear on not less than twenty ballots; and, provided further, that the number of members of the Academy be not already one hundred or over, in which case, to be declared to be elected, he must receive four-fifths of the votes cast, and his name must appear on at least twenty-five ballots.

Should several candidates have the same minimum number of votes on the preference list, the requisite number for completing the list shall be selected from them by a two-thirds vote of the members present.

Election of members shall be held only at the regular stated session of each year, held in Washington, and not more than five members shall be elected at that session.

Before, and during elections, a discussion of the merits of nominees will be in order.

The election of members may be suspended at any time by a majority vote of the members present.

SECT. 6. Every member elect shall accept his membership, personally or in writing, before the close of the next stated session after the date of his election. Otherwise, on proof that the Secretary has formally notified him of his election, his name shall not be entered on the roll of members.

Sect. 7. Foreign Associates may be nominated by a committee of five members to be appointed for that purpose by the President, and elected at any stated session by a two-thirds vote of the members present. The election shall be

had by each member indicating on a ballot those names for which he votes, and those nominees whose names appear on two-thirds of the ballots shall be declared elected.

Sect. 8. A diploma, with the corporate scal of the Academy and the signatures of the officers, shall be sent by the appropriate Secretary to each member on his acceptance of his membership, and to Foreign Associates on their election.

Sect. 9. Resignations shall be addressed to the President and acted on by the Academy.

ARTICLE V.

OF SCIENTIFIC COMMUNICATIONS, PUBLICATIONS, AND REPORTS.

SECT. 1. Communications on scientific subjects shall be read at scientific meetings of the academy, and papers by any member may be read by the author or by any other member, notice of the same having been previously given to the Secretary.

SECT. 2. Any member of the Academy may read a paper from a person who is not a member; and shall not be considered responsible for the facts or opinions expressed by the author, but shall be hold responsible for the propriety of the paper.

Persons who are not members may read papers on invitation of the President with the advice of the Council.

SECT. 3. The Academy may provide for the publication, under the direction of the Council, of Proceedings, Memoirs, and Reports.

SECT. I. Propositions for investigations or reports by the Academy shall be submitted to the Council for approval; except those requested by the Government of the United States, which shall be acted on by the President, who will, in such cases, report their results to the Government, as soon as obtained, and to the Academy at its next following stated session.

SECT. 5. The advice of the Academy shall be, at all times.

at the disposition of the Government, upon any matter of Science or Art within its scope.

SECT. 6. An annual Report to be presented to Congress shall be prepared by the President, and before its presentation submitted by him, first to the Council, and afterwards to the Academy at one of the stated sessions.

SECT. 7. Medals and Prizes may be established, and the means of bestowing them accepted by the Academy, upon the recommendation of the Council, by whom all the necessary arrangements for their establishment and award shall be made.

Bequests and trusts having for their object the advancement of science may also be accepted and administered by the Academy.

ARTICLE VI.

OF THE PROPERTY OF THE ACADEMY.

SECT. 1. All investments shall be made by the Treasurer, in the corporate name of the Academy, in stocks of the United States.

SECT. 2. No contract shall be binding upon the Academy which has not been first approved by the Council.

SECT. 3. The assessments required for the support of the Academy shall be fixed by the Academy on the recommendation of the Council.

ARTICLE VII.

OF ADDITIONS AND AMENDMENTS.

Additions and Amendments to the Constitution shall be made only at a stated session of the Academy. Notice of a proposition for such a change must be given at a stated session, and shall be referred to the Council, which may amend the proposition, and shall report thereon to the Academy at the same session. Its report shall be considered by the Academy in Committee of the Whole for amendment.

The proposition as amended, if adopted in Committee of the Whole, shall be voted on at the next stated session, and if it receive two-thirds of the votes cast, it shall be declared adopted.

Absent members may send their votes on pending changes in the Constitution to the Home Secretary in writing, and such votes shall be counted as if the member were present.

RULES.

I. In the absence of any officer a member shall be chosen to perform his duties temporarily, by a plurality of *riva voce* votes, upon open nominations.

II. The accounts of the Treasurer shall be referred to an Auditing Committee of three members, to be appointed by the President at the meeting at which the accounts are presented; which Committee shall report before the close of that session, and shall then be discharged.

The bonds, securities, and other property owned or held in trust by the Academy shall be inspected and verified by a Committee to be annually appointed by the President. The report of this Committee shall be presented to the Academy at its first stated session in each year, and referred with the accounts to the Auditing Committee.

III. A Committee of Arrangements consisting of five members shall be appointed by the President for each stated session of the Academy. This Committee shall meet not less than two weeks previous to each session. It shall be in session during the meetings to make arrangements for the reception of the members; to arrange the business of each day; to receive the titles of papers, reports, etc.; and to arrange the order of reading, and, in general, to attend to all business and scientific arrangements.

IV. At the meetings the order of business shall be as follows:

- 1. Chair taken by the President, or, in his absence, by the Vice-President.
 - 2. Roll of members called by Home Secretary.
 - 3. Minutes of the preceding meeting read and approved.
 - 4. Stated business.

- 5. Reports of President, Secretaries, Treasurer, and Committees.
 - 6. Business from Council.
 - 7. Other business.
- 8. On the last day of the session the rough minutes of that day's proceedings are to be read for correction.
- V. The rules of order of the Academy shall be those of the Senate of the United States, unless suspended by unanimous consent.
- VI. Unless otherwise ordered by the Academy, the scientific meetings shall be convened at noon.
- VII. The death of members shall be announced by the President on the last day of any session, when a member shall be selected by the President to furnish a biographical notice of the deceased at the next stated session. If such notice be not then furnished, another member may be selected by the President in place of the first, and so on until the duty is performed.
- VIII. All discussions as to the claims and qualifications of nominees at meetings of the Academy will be held strictly confidential, and remarks and criticisms then made may be communicated to no person who was not a member of the Academy at the time of the discussion.
- IX. The Secretaries will receive memoirs at any time, and report the date of their reception at the most session. But no memoir shall be published unless it has been read before the Academy.
- X. Memoirs shall date in the records of the Academy from the date of their presentation to the Academy, and the order of their presentation shall be that in which they were registered, unless changed by consent of the author.
- XI. Papers from persons not members read before the Academy, and intended for publication, shall be referred, at the meeting at which they are read, to a committee of

members competent to judge whether the paper is worthy of publication. Such Committee shall report to the Academy as early as practicable, and not later than the next stated session.

XII. An Annual of the Academy shall be prepared and published by the Secretaries.

XIII. The printing of the Academy shall be under the charge of a Committee of Publication, to consist of the Home Secretary, and four other members to be named by the President with the advice and consent of the Council.

XIV. The Annual Report of the Academy may be accompanied by a memorial to Congress in regard to such investigations and other subjects as may be deemed advisable, recommending appropriations therefor when necessary.

XV. The proper Secretary shall acknowledge all donations made to the Academy, and shall report them at the next stated session.

XVI. The books, apparatus, archives, and other collections of the Academy shall be deposited in some safe place in the city of Washington. A list of the articles so deposited shall be kept by the Home Secretary, who is authorized to employ a clerk to take charge of them.

XVII. A stamp corresponding to the corporate scal of the Academy shall be kept by the Secretaries, who shall be responsible for the due marking of all books and other objects to which it is applicable.

Labels or other proper marks of similar device, shall be placed upon objects not admitting of the stamp.

XVIII. On the first day of each stated session, immediately after calling the roll of members, a Recording Secretary shall be elected by a plurality of members present, to assist the Home Secretary in keeping the records of the session.

XIX. It shall be the duty of the Committee of Arrangements to fix the length of time to be devoted to reading of

all papers submitted, and to limit the time to be occupied in their discussion.

XX. Ballots for election of members may be sent by sealing them up in a blank envelope, and enclosing this in another, across the back of which is written the name of the sender, and which is addressed to the Home Secretary; such envelopes will be opened only by the tellers.

XXI. Any rule of the Academy may be amended, suspended, or repealed on the written motion of any two members, signed by them, and presented at a stated session of the Academy; provided the same shall be approved by a majority of the members present.

XXII. Nominations for membership should state the full name, residence, the official position, and the special scientific studies of the candidate. A form of nomination shall be prepared by the Home Secretary.

By a resolution adopted January 12, 1864, the President is, ex officio, a member of all Government Committees of the Academy.

ORGANIZATION OF THE ACADEMY.

1885.

EXPIRATION OF TERM. MARSH, O. C., President April, 1889. NEWCOMB, S., Vice-President " 1889. AGASSIZ, ALEX., Foreign Secretary " 1886. HALL, A. Home Secretary " 1889. COFFIN, J. H. C., Treasurer " 1887.

ADDITIONAL MEMBERS OF COUNCIL, 1885-'86.

BAIRD, S. F. GIBBS, W. HILGARD, J. E. MEIGS, M. C. SCUDDER, S. H. YOUNG, C. A.

COMMITTEES OF THE ACADEMY.

On Ways and Means to Provide a Fund for the Academy.

Rogers, Fairman, Chairman.

MARSH, O. C.

CHANDLER, C. F.

AGASSIZ, ALEXANDER

PUMPELLY, R.

On Weights, Measures, and Coinage.

BARNARD, F. A. P., Chairman. GIBBS, WOLCOTT HILGARD, J. E. MEIGS, M. C. NEWCOMB, S.
NEWTON, H. A.
PEIRCE, C. S.
TROWBRIDGE, W. P.

On the Election of Foreign Associates.

AGASSIZ, ALEX., Chairman. DANA, J. D.

GIBBS, W. HALL, A.

NEWCOMB, S.

On reserving public lands on and man Mount Whitney, California, for seven tific purposes,

LANGLEY, S. P., Chairman.

BREWER, W. H.

POWELL, J. W.

To co-operate with the National Board of Health.

MITCHELL, S. WEIR, Philadelphia, Pa., Chairman.

BARKER, GEORGE, F., Philadelphia, Pa.

BILLINGS, J. S., Washington, D. C.

BREWER, W. H., New Haven, Conn.

CHANDLER, CHARLES F., New York City.

GIBBS, WOLCOTT, Cambridge, Mass.

WALKER, F. A., Boston, Mass.

On Publication

THE HOME SECRETARY. BAIRD, S. F.

COFFIN, J. H. C. NEWCOMB, S.

POWELL, J. W.

On Publications of the Academy.

GILL, T.

On the relation of the Academy to the Government.

THE PRESIDENT.

VICE-PRESIDENT. SECRETARIES.

BAIRD, S. F.

COFFIN, J. H. C. HILGARD, J. E.

MEIGS, M. C. POWELL, J. W.

On the Organization of the National Surveys and Signal Service.

MEIGS, M. C., Chairman.

BREWER, WILLIAM H.

Comstock, C. B.

LANGLEY, S. P.

NEWCOMB, S.

Pickering, E. y.

TROWBRIDGE, W. P.

WALKER, F. A.

Young, C. A.

TRUST FUNDS.

Board of Direction of the Bache Fund.

DANA, J. D.

HILGARD, J. E.

GIBBS, W.

Board of Trustees of the Watson Fund.

HILGARD, J. E.

COFFIN, J. H. C.

On the Henry Draper Medal.

BARKER, G. F., Chairman.

NEWCOMB, S.

GIBBS, W.

NEWCOMB, S. WRIGHT, A. W.

Young, C. A.

On the J. Lawrence Smith Medal.

GIBBS, WOLCOTT, Chairman.

HALL, A.

BRUSH, G. J.

PUMPELLY, R.

RUTHERFUND, L. M.

r

MEMBERS

OF THE

National Academy of Sciences.

JUNE 10, 1885.

		ate of ection.
ABBE, CLEVELAND	Washington, D. C.	1879
ABBOT, HENRY L., U. S. A W		1872
AGASSIZ, ALEXANDER	Cambridge, Mass.	1866
ALLEN, J. ASAPH	can Museum, New York City.	1876
BAIRD, SPENCER F	Washington, D. C.	1864
BARKER, GEORGE F		1876
BARNARD, FREDERICK A. P	New York City.	
BARTLETT, WILLIAM H. C 75 Loca	est Hill Ave., Yonkers, N. Y.	
BELL, A. GRAHAM	Washington, D. C.	1883
BILLINGS, JOHN S., U. S. A.	Washington, D. C.	1883
Brewer, William H.	New Haven, Conn.	1880
Brooks, W. K Johns Hopkin	s University, Baltimore, Md.	1884
Brown-Sequard, Charles E	Paris, France.	1868
Brush, George J		1868
CHANDLER, CHARLES F.	New York City.	1874
COFFIN, JOHN H. C., U. S. N.	Washington, D. C.	
Comstock, Cyrus B., U. S. AArr	ny Building, New York City.	1884
COOKE, JOSIAH P.		1872
COPE, EDWARD D	0 Pine St., Philadelphia, Pa.	1872
Cours, Elliott	Washington, D. C.	1877
CRAFTS, JAMES MEc	ole des Mines, Paris, France.	1872
DALTON, J. C	W. 48th St., New York City.	1864
DANA, EDWARD S	New Haven, Conn.	1884
DANA, JAMES D.	New Haven, Conn.	
DAVIDSON, GEORGE	San Francisco, Cal.	1874
DUTTON, CLARENCE E., U. S. A.	Washington, D. C.	1884
EADS, JAMES B.	Saint Louis, Mo.	1873
FARLOW, W. G.	Cambridge, Mass.	1879
FERRIL, WILLIAM	Washington, D. C.	1868
GENTH, FREDERICK A.	W. Philadelphia, Pa.	1872
GIBBS, JOSIAH WILLARD	New Haven, Conn.	1879
GIBBS, WOLCOTT	0 -	
GILBERT, GROVE K.	Washington, D. C.	1883
GILL, THEODORE N.	Washington, D. C.	1873

		lection.
GOULD, BENJAMIN A	Cordoba, Argentine Republic, S. A.	
HAGUE, ARNOLD	U. S. Geological Survey, New York City.	1885
	Washington, D. C.	1875
	Albany, N. Y.	
	1803 Arch St., Philadelphia, Pa.	1873
	Oakland, Cal.	1872
HILGARD, JULIUS E	Washington, D. C.	
	Washington, D. C.	1874
		1883
	Madison, Wisconsin.	1885
		1873
HYATT, ALPHEUS	Soc. of Nat. History, Boston, Mass.	1875
JACKSON, CHARLES L	Cambridge, Mass.	1883
JOHNSON, SAMUEL W	New Haven, Conn.	1866
	62 Cedar St., New York.	1876
LANGLEY, SAMUEL P	Observatory, Alleghany, Pa.	1876
	Philadelphia, Pa.	1884
LESLEY, J. PETER	1008 Clinton St., Philadelphia, Pa.	
	Berkeley, Cal.	1878
LECONTE, JOSEPH	Berkeley, Cal.	1875
	302 4th St., Columbus, Ohio.	1864
LOOMIS, ELIAS	New Haven, Conn.	1873
	Cambridge, Mass.	1873
LYMAN, THEODORE	Brookline, Mass.	1872
Marsh, O. C	New Haven, Conn.	1874
MAYER, ALFRED M		1872
MEIGS, MONTGOMERY C.,	U. S. A Washington, D. C.	1865
MITCHELL, HENRY	U. S. Coast Survey, Boston, Mass.	1885
MITCHELL, S. WEIR	1332 Walnut St., Philadelphia, Pa.	1865
Morse, Edward S	Salem, Mass.	1876
MORTON, HENRY	Hoboken, N. J.	1874
	New York City.	
	N Washington, D. C.	1869
	New Haven, Conn.	
	Army Building, New York City.	1876
OLIVER, JAMES E	Ithaca, N. Y.	1872
PACKARD, A. S.	Providence, R. I.	1872
	U. S. C. Surrey, Washington, D. C.	1877
	Clinton, N. Y.	1876
	Cambridge, Mass.	1873
	Washington, D. C.	1880
	Gibbs Ave., Newport, R. I.	1872
PUTNAM, FREDERICK W.		1885
	Johns Hopkins University, Baltimore, Md.	1882
	202 W. Rittenhouse Sq., Philadelphia, Pa.	
KOGERS, WILLIAM A	Cambridge Mass	1885

		nte of
ROOD, OGDEN N		1865
ROWLAND, HENRY A Johns Hopkins U	niversity, Baltimore, Md.	1881
RUTHERFURD, LEWIS M 175 Second	and Ave., New York City.	
SCHOTT, CHARLES A.		1872
SCUDDER, SAMUEL H.		1877
SELLERS, WILLIAM 1600 Hamil		1873
SMITH, SIDNEY I.	New Haven. Conn.	1884
TROWBRIDGE, JOHN	Cambridge, Mass.	1878
TROWBRIDGE, WILLIAM P.		1872
TRUMBULL, J. H.		1872
TUCKERMAN, EDWARD		1868
VERRILL, A. E.		1872
WALKER, FRANCIS A.		1878
WOOD, HORATIO C 1925 Chest	nut St., Philadelphia, Pa.	1879
WORTHEN, A. H.		1872
WRIGHT, ARTHUR W.		1881
Young, Charles A.		1872
	·	
HONORARY MEN	MBERS.	
Gray, Asa	Cambridge	Mass
LONGSTRETH, MIERS F.	Dark	Pa
Longstreth, Miers F		
DECEASED MEM	IBERS.	
	Date of	Death
	Date of	Death 1813
*Agassiz, Louis	Date of Dec. 14,	18/3
* Agassiz, Louis * Alexander, J. H.	Date of Dec. 14,	18/3 7
* Agassiz, Louis * Alexander, J. H * Alexander, Stephen	Date of Dec. 14, March 2, June 25,	18/3 7 1867 1883
* Agassiz, Louis	Date of Dec. 14, — March 2, — June 25, — Feb. 14,	18/3 1 1867 1883 1867
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G.	Date of	18/3 1867 1883 1867 1882
* Agassiz, Louis * Alexander, J. H * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G * Caswell, Alexis	Date of	18/3 27 1867 1883 1867 1882 1877
* Agassiz, Louis * Alexander, J. H * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G * Caswell, Alexis * Chauvenet, William	Date of	18/3 1867 1883 1867 1882 1877 1870
* Agassiz, Louis * Alexander, J. H * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G * Caswell, Alexis * Chauvenet, William * Clark, Henry James	Date of	18/3 7 1867 1883 1867 1882 1877 1870
* Agassiz, Louis * Alexander, J. H * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H	Date of Dec. 14, March 2, June 25, Feb. 14, May 14, Jan. 8, Dec. 13, July 1, Jan. 6,	18/3 7 1867 1883 1867 1882 1877 1870 1873
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H.	Date of	18/3 7 1867 1883 1867 1882 1877 1870 1873 1873
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry	Date of Dec. 14, March 2, June 25, Feb. 14, May 14, Jan. 8, Dec. 13, July 1, Jan. 6, Feb. 18, Nov. 20,	18/3 7 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W.	Date of Dec. 14, March 2, June 25, Feb. 14, May 14, Jan. 8, Dec. 13, July 1, Jan. 6, Feb. 18, Nov. 20, Jan. 4, Jan. 4,	18/3 7 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George	Date of Dec. 14, March 2, June 25, Feb. 14, May 14, Jan. 8, Dec. 13, July 1, Jan. 6, Feb. 18, Nov. 20, Jan. 4, Feb. 11,	18/3 1 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George * Frazer, John Fries	Date of Dec. 14, March 2, June 25, Feb. 14, May 14, Jan. 8, Dec. 13, July 1, Jan. 6, Feb. 18, Nov. 20, Jan. 4, Feb. 11, Oct. 14,	18/3 1 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882 1884 1872
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George * Frazer, John Fries * Gabb, William M.	Date of Dec. 14, March 2, June 25, Feb. 14, May 14, Jan. 8, Dec. 13, July 1, Jan. 6, Feb. 18, Nov. 20, Jan. 4, Feb. 11, Oct. 14, May 30,	18/3 7 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882 1884 1872 1878
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George * Frazer, John Fries * Gabb, William M. * Gilliss, James Melville	Date of Dec. 14, March 2, June 25, Feb. 14, Jan. 8, July 1, Jan. 6, Feb. 18, Nov. 20, Jan. 4, Feb. 11, Oct. 14, May 30, Feb. 9,	18/3 1 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882 1884 1872 1878 1865
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George * Frazer, John Fries * Gabb, William M. * Gilliss, James Melville * Gould, Augustus A.	Date of Dec. 14, March 2, June 25, May 14, Jan. 8, July 1, Jan. 6, Feb. 18, Nov. 20, Jan. 4, Feb. 11, Oct. 14, May 30, Feb. 9, Sept. 15,	18/3 1 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882 1884 1872 1878 1865 1866
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George * Frazer, John Fries * Gabb, William M. * Gilliss, James Melville * Gould, Augustus A. Guyot, Arnold	Date of Dec. 14,	18/3 1 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882 1884 1872 1878 1865 1866 1884
* Agassiz, Louis * Alexander, J. H. * Alexander, Stephen * Bache, Alexander Dallas Barnard, J. G. * Caswell, Alexis * Chauvenet, William * Clark, Henry James * Coffin, James H. Davis, Charles H. Draper, Henry Draper, John W. Engelmann, George * Frazer, John Fries * Gabb, William M. * Gilliss, James Melville * Gould, Augustus A.	Date of Dec. 14,	18/3 1 1867 1883 1867 1882 1877 1870 1873 1873 1877 1882 1882 1884 1872 1878 1865 1866 1884 1878

		Date of Death.
	* HITCHCOCK, EDWARD	Feb. 27, 1864
	* Holbrook, J. E.	Sept. 8, 1871
	*Hubbard, J. S.	Aug. 16, 1863
	*HUMPHREYS, A. A	
	* HALDEMAN, S. S.	Sept. 10, 1880
	* KIRTLAND, JARAD P.	
	* LANE, J. HOMER	, 1880
	* LeConte, John L.	Nov. 15, 1883
	* MAHAN, D. H.	Sept. 16, 1871
	MARSH, G. P.	July 23, 1882
	* МЕЕК, F. В.	Dec. 21, 1877
	* Morgan, Lewis H.	Dec. 14, 1881
	NORTON, WILLIAM A.	Sept. 21, 1883
	* Pourtales, L. F.	July 17, 1880
	Rodgers, John	May 5, 1882
	ROGERS, WILLIAM B	May 30, 1882
	ROGERS, ROBERT E.	Sept. 7, 1884
	* SAXTON, JOSEPH	
	*SILLIMAN, BENJ., Sr.	Nov. 24, 1864
	SILLIMAN, BENJ., Jr.	Jan. 14, 1885
	*SMITH, J. LAWRENCE	Oct. 12, 1883
×	STIMSON, WILLIAM	May 26, 1873
′ `	*STRONG, THEODORE	
	*SULLIVANT, W. S	April 30, 1873
	*Torrey, John	March 10, 1873
	*Totten, J. G.	April 22, 1864
	* WARREN, G. K.	Aug. 8, 1882
	WATSON, JAMES C.	Nov. 23, 1880
	* WINLOCK, JOSEPH	Jan. 11, 1875
X	Woodward, J. J., U. S. A	
,	* WYMAN, JEFFRIES	

^{*}Biographical notices have been presented of those designated by a *.

FOREIGN ASSOCIATES.

	7.	
	BUNSEN, ROLERT W.	Heidelberg.
	MILNE-EDWARDS, HENRY	
	AIRY, SIR GEORGE B.	
	OWEN, RICHARD	London.
	BURMEISTER, C. H. C.	
	STRUVE, OTTO VON	
	ADAMS, J. C.	Cambridge.
	CAYLEY, ARTHUR	Cambridge.
	CLAUSIUS, RUDOLPH	Bonn.
	HELMHOLTZ, BARON H. VON.	Berlin.
	KIRCHOFF, G. R.	Berlin.
	Pasteur, Louis	Paris.
	STOKES, G. G.	Cambridge.
	Sylvester, J. J.	Oxford.
	Hooker, Sir J. D.	Kew.
7	THOMPSON, SIR WILLIAM	Glasgow.
	AUWERS, ARTUR	
	Bertrand, J. L. F.	Paris.
	HUXLEY, T. H.	London.
	VIRCHOW, RUDOLPH VON	
	Berthelot, M. P. E.	
	Boussingault, J. B. J. D.	
	CHEVREUL, M. E.	
	DE CANDOLLE, ALPHONSE	
	KÖLLIKER, ALBERT VON	
	OPPOLZER, THEODORE VON	
	RICHTHOFEN, F. VON	Berlin.

DECEASED FOREIGN ASSOCIATES.

SIR WM. ROWAN HAMILTON. MICHEL CHASLES. MICHAEL FARADAY. L. ELIE DE BEAUMONT. SIR DAVID BREWSTER. G. A. A. PLANA. F. W. A. ARGELANDER. FRIEDRICH WÖHLER. J. B. DUMAS.

KARL ERNST VON BAER. YSIN RODERICK I. MURCHISON. VICTOR REGNAULT. H. W. DOVE. C. A. F. PETERS. JUSTUS VON LIEBIG. ALEXANDER BRAUN. JOACHIM BARRANDE. ADOLPHE WÜRTZ.

